IN THE CLAIMS:

1. (Currently amended) A method, comprising:

a) providing

i) [[a]] first and second ~~sample~~ samples comprising [[a]] first and second proteomes, wherein each of said proteomes comprises a plurality of polypeptides, and wherein said first proteome comprises a proteome of a non-cancerous cell and said second proteome comprises a proteome of a cancerous cell;

ii) a first separation device configured for separation of said polypeptides in said ~~sample~~ samples based on charge;

iii) a second separation device configure for separation of said polypeptides is said ~~sample~~ samples based on hydrophobicity; and

iv) a third separation device configured for separation of said polypeptides in said ~~sample~~ samples based on size; and

b) separating said first and second ~~sample~~ samples with said first separation device to generate [[a]] first and second charge separated protein ~~sample~~ samples, wherein said charge separated ~~sample~~ samples comprises a plurality of fractions;

c) separating said charge separated ~~sample~~ samples with said second separation device to generate [[a]] first and second charge and hydrophobicity separated ~~sample~~ samples, wherein said charge and hydrophobicity separated ~~sample~~ samples comprises a plurality of fractions; ~~and~~

d) separating said first and second charge and hydrophobicity separated ~~sample~~ samples with said third separation device to generate [[a]] first and second charge, hydrophobicity, and size separated ~~sample~~ samples, wherein said charge, hydrophobicity and size separated ~~sample~~ samples comprises a plurality of fractions; and

e) comparing said charge, hydrophobicity, and size separated first sample to said charge, hydrophobicity, and size separated second sample.

2. (Original) The method of claim 1, wherein said first separation device is configured

for performing a separation technique selected from the group consisting of isoelectric focusing gel electrophoresis, free-flow electrophoresis, rotofor electrophoresis and ion exchange chromatography.

3. (Original) The method of claim 1, wherein said second separation device is configured for performing a separation technique selected from the group consisting of reversed-phase chromatography and hydrophobic interaction chromatography.

4. (Original) The method of claim 1, wherein said third separation device is configured for performing a separation technique selected from the group consisting of SDS-gel electrophoresis, size exclusion chromatography, and capillary electrophoresis.

5. (Original) The method of claim 1, further comprising the step of detecting polypeptides in said fractions of said charge, hydrophobicity, and size separated sample.

6. (Original) The method of claim 5, wherein said detecting comprises a detection method selected from the group consisting of UV/VS spectrophotometry, fluorescence spectrophotometry, and mass spectrometry.

7. (Original) The method of claim 6, wherein said mass spectroscopy is selected from the group consisting of MALDI-TOF-MS, ESI oa TOF, ion trap mass spectrometry, ion trap/time-of-flight mass spectrometry; quadrupole mass spectrometry, triple quadrupole mass spectrometry, Fourier Transform (ICR) mass spectrometry, and magnetic sector mass spectrometry.

8. (Original) The method of claim 1, further comprising the step of attaching said plurality of fractions of said charge, hydrophobicity, and size separated sample to a solid support.

9. (Original) The method of claim 8, wherein said plurality of fractions are arrayed on said solid support.

10. (Original) The method of claim 9, further comprising the step of performing a functional assay on said arrayed plurality of fractions.

11. (Original) The method of claim 10, wherein said functional assay comprises an antibody binding assay.

12-15. (Canceled)

16-33. (Canceled)